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Comparison of Patients' and Surgeons' Expectations in Foot and Ankle Surgery

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Abstract

Background: Aligning patient and surgeon expectations may improve patient satisfaction and outcomes. This study aimed to assess differences in expectations of foot and ankle surgery between patients and their surgeons.

Methods: Two hundred two patients scheduled to undergo foot or ankle surgery by one of 7 fellowship-trained foot and ankle surgeons were enrolled. Preoperatively, patients and surgeons completed the Hospital for Special Surgery Foot & Ankle Surgery Expectations Survey independently. Differences between patient and surgeon overall expectations scores, number of expectations, and number of expectations with complete improvement expected were assessed. A difference of $\geq$10 points was considered a clinically important difference in expectations score. Associations between patient demographic and clinical characteristics, major/minor surgery, and individual surgeon with differences in expectations were also assessed.

Results: Overall, 66.3% of patients had higher expectations, 21.3% had concordant expectations, and 12.4% had lower expectations compared with their surgeons. On average, patients had higher expectations scores than their surgeons (70 $\pm$ 20 vs 52 $\pm$ 20 points, $P < .001$). Patients expected complete improvement in a greater number of expectations than surgeons (mean 11 $\pm$ 7 vs 1 $\pm$ 3, $P < .001$). Patients had higher expectations than surgeons for 18 of 23 items (78%). Items that had the greatest number of patients with higher expectations than surgeons were "improve confidence in foot/ankle," "prevent foot/ankle from getting worse," and "improve pain at rest." Higher body mass index (BMI) ($P = .027$) and individual surgeon ($P < .001$) were associated with greater differences between patient-surgeon expectations. Major/minor surgery was not associated with differences in expectations ($P \geq .142$).

Conclusion: More than two-thirds of patients had significantly higher expectations than their surgeons. Higher BMI was associated with higher patient than surgeon expectations. These results emphasize the importance for foot and ankle surgeons to adequately educate patients preoperatively.

Level of Evidence: Level II, prospective comparative study.

Keywords: patient and surgeon expectations, foot and ankle surgery, orthopedics

Introduction

Patients' expectations of orthopedic surgery have previously been shown to be associated with their clinical outcomes and postoperative satisfaction, both in foot and ankle surgery and in total joint arthroplasty.[1,9-11,15,16] The concordance between surgeon and patient expectations of surgery has also been studied in various orthopedic subspecialties, including spine, total knee arthroplasty (TKA), total hip arthroplasty (THA), and anterior cruciate ligament reconstruction.[7,8,12-14,18] Within foot and ankle surgery, diagnosis and other patient demographic and clinical factors have been found to be associated with higher patient expectations.[3,4] However, the extent to which surgeons' and

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patients' expectations align in foot and ankle surgery has seldom been evaluated.[17] Based on prior literature showing the role of patient expectations on influencing outcomes, it is important to understand differences between surgeon and patient expectations and factors that influence these differences in order for surgeons to appropriately educate patients about the realistic expectations of foot and ankle surgery.

In this study, the primary aim was to assess differences in expectations of foot and ankle surgery between patients and their surgeons. Secondary aims were to assess the effects of major or minor surgery, patients' demographic and clinical characteristics, and individual surgeon on differences in patients' and surgeons' expectations. Our hypotheses were that patients would have greater expectations of foot and ankle surgery than their surgeons, patients undergoing major surgery would have greater expectations than their surgeons compared to patients undergoing minor surgery, greater comorbidity would be associated with patients having greater expectations than their surgeons, and differences in patient-surgeon expectations would vary by surgeon.

Methods

Study Design

This prospective cohort study was approved by the Institutional Review Board at our institution. There was no funding required. Patients who were scheduled to undergo foot or ankle surgery between February and July 2019 by one of 7 fellowship-trained foot and ankle surgeons at an academic hospital were enrolled. There was a range of experience among the surgeons, with each having been in practice for 1-28 years (mean, 11.9 ± 8.6 years). Major surgeries were defined as those involving the midfoot and/or hindfoot and/or after which patients were nonweightbearing postoperatively. Minor surgeries were defined as those after which patients were immediately weightbearing postoperatively. Inclusion criteria included age 18 years or older and a scheduled foot or ankle surgery. Exclusion criteria included inability to speak English, inability to provide informed consent, and removal of hardware as the only procedure. Removal of hardware was excluded as this was considered a very minor procedure. All patients were enrolled preoperatively 1-2 weeks prior to surgery and provided informed consent. Research assistants contacted and enrolled patients by telephone, and surveys were sent via e-mail after enrollment. If patients could not be reached after multiple phone calls, their surgeons attempted to reach them by telephone and e-mail. Surgeons obtained informed consent for surgery, and research assistants and surgeons obtained informed consent for the study.

All enrolled patients completed the 23-item Hospital for Special Surgery Foot and Ankle Expectations Survey preoperatively between the time of enrollment and surgery. Each item was scored on a Likert-type scale with 5 answer choices ranging from 0 ("I do not have this expectation, or this expectation does not apply to me") to 4 ("Back to normal or complete improvement"). Scores were calculated by summing responses to each item, dividing by the maximum score (92), then multiplying by 100. Scores thus range from 0 to100, with higher scores indicating higher expectations. This survey has previously been found to be valid, reliable, and applicable to a diverse range of foot and ankle diagnoses.[5] Surgeons also completed the survey for each patient either after the preoperative visit or on the day prior to surgery, based on their preference, and were blinded to patients' responses. The surgeons' version of the survey was modified such that it read, "How much improvement do you expect your patient to receive in the following areas as a result of his/her foot or ankle surgery?"

Patient demographic and clinical data were obtained from patient charts. Demographic data included age, sex, race, marital status, employment status, and payer type. Clinical data included body mass index (BMI), past medical history, and prior surgeries. The Charlson Comorbidity Index (CCI) was used to quantify comorbidity.[2] Patients were asked about their educational level and use of any assistive devices preoperatively, such as a cane, crutches, walker, or wheelchair.

Subjects

In total, 313 patients were eligible for the study. Fifty-eight patients (18.5%) were unwilling to participate and 53 patients (16.9%) could not be reached preoperatively. The final cohort consisted of 202 patients (64.5% of those eligible). Complete demographic and clinical characteristics of enrolled patients are described in Table 1. There were no differences in demographic or clinical characteristics between enrolled and unenrolled patients, including patients with Medicaid, at 0.5% (1/202) vs 0% (0/111), respectively. The mean age of included patients was 52.4 years (range, 18.4-85.3), and 68.8% of subjects (139/202) were female. Diagnoses are described in Table 2, and procedures are described in Table 3. Overall, 68.8% of patients (139/202) underwent a major surgery, and 31.2% (63/202) underwent a minor surgery.

Statistics

Descriptive statistics are expressed as means and standard deviations, and categorical and binary variables are expressed as frequencies. Differences between surgeon and patient expectations were assessed in terms of (1) overall expectations score, (2) number of expectations (number of survey items for which at least "A little improvement" was expected), (3) number of expectations with complete improvement expected (rated as "Back to normal or

Table 1. Patient Demographics.[a]

Age, y	52.4 ± 16.2 (18.4-85.3)
Body mass index	27.0 ± 5.6 (17.4-49.2)
Females	139 (68.8)
Nonwhite race	21 (11.6)
Marital status	
Single	51 (25.2)
Married or domestic partner	129 (63.9)
Widowed	7 (3.5)
Divorced	15 (7.4)
Education	
Some high school	2 (1.0)
Completed high school	16 (7.9)
Some college	24 (11.9)
Completed college	80 (39.6)
Advanced degree	80 (39.6)
Employment status	
Full-time	92 (45.5)
Part-time	6 (3.0)
Self-employment	24 (11.9)
Retired	44 (21.8)
Disability	4 (2.0)
Unemployed	23 (11.4)
Full-time student	9 (4.5)
Insurance status	
Private	158 (78.2)
Medicare	39 (19.3)
Workers compensation	3 (1.5)
Self-pay	1 (0.5)
Medicaid	1 (0.5)
Prior orthopedic surgery	141 (69.8)
Prior foot or ankle surgery	90 (44.6)
Revision	16 (14.4)
Use of an assistive device	86 (42.6)
Charlson comorbidity index	
0	170 (84.2)
1	17 (8.4)
≥2	15 (7.5)

[a]Continuous variables are expressed as mean ± standard deviation (range). Categorical variables are expressed as n (% of cohort).

Table 2. Primary Diagnoses.

Diagnosis	Frequency [a]
Hallux valgus	41 (20.3)
Other	34 (16.8)
Ankle arthritis	30 (14.9)
Hallux rigidus	29 (14.4)
Flatfoot	19 (9.4)
Chronic tendon injury[b]	16 (7.9)
Midfoot/hindfoot arthritis	12 (5.9)
Acute trauma	11 (5.4)
Ankle instability/OCL	10 (5.0)

Abbreviation: OCL, osteochondral lesion.
[a]Data expressed as n (% of cohort).
[b]Chronic tendon injuries included chronic tendon tears or tendinopathy of the Achilles, peroneal, or posterior tibial tendons.

complete improvement"), and (4) item-specific differences. A difference of ≥10 points was considered a clinically important difference. This was based on an estimate of the minimal clinically important difference (MCID) as half a standard deviation from results of a previous study using this survey in 352 foot and ankle patients, which yielded a mean score of 60.3 with a standard deviation of 18.7.[4] Three levels of agreement were defined: patient expectations lower than their surgeon's (a score at least 10 points lower than the surgeon's score), patient expectations concordant with their surgeon's (a score within 9 points of the surgeon's score), and patient expectations higher than their surgeon's (a score at least 10 points higher than the surgeon's score).

Based on a power analysis with $\alpha = 0.05$ and $\beta = 0.80$, 30 surgeon-patient pairs were required to detect a difference of 10 points between expectations scores. We assumed major surgeries to be about 3 times as common as minor surgeries, based on a cohort from a prior study on expectations in foot and ankle surgery.[4] Assuming a conservative effect size of 0.5 and $\alpha = 0.05$, 45 surgeon-patient pairs in the minor surgery group and 135 patients in the major surgery group would yield $\beta = 0.82$, for a total of 180 surgeon-patient pairs.

Comparisons in overall expectation scores and in the number of expectations between patients and surgeons were assessed with 1-sample *t* tests. Comparisons in the number of expectations with complete improvement expected between patients and surgeons were assessed with Wilcoxon signed-rank tests. An item-specific analysis with Wilcoxon signed-rank tests using the Bonferroni correction for multiple comparisons was used to compare surgeons' and patients' responses for each item of the survey. Simple linear regression models were used to assess differences in patients' and surgeon's preoperative overall expectations of foot and ankle surgery based on whether patients were receiving major or minor foot or ankle surgery.

Pearson correlation coefficients were used to assess correlations between continuous variables and differences between patient and surgeon expectations. Correlations of <0.20 were considered weak; 0.21-0.40, fair; 0.41-0.60, moderate; 0.61-0.8, strong; and 0.81-1.00, very strong.[14] Student *t* tests or simple linear regression models were used to evaluate associations of categorical variables with patient-surgeon differences in expectations scores, numbers of expectations, and numbers of expectations with complete improvement expected. Comparisons in baseline patient characteristics were made across the 3 levels of agreement using analyses of variance for continuous variables and chi-squared or Fisher exact tests for binary and categorical variables.

Table 3. Primary Procedures.

Procedure	Frequency[a]
Lapidus bunionectomy	31 (15.3)
Total ankle replacement	25 (12.4)
Other	24 (11.9)
Midfoot/hindfoot/ankle fusion	17 (8.4)
Tendon repair/reconstruction	17 (8.4)
First MTPJ fusion	15 (7.4)
Flatfoot reconstruction	13 (6.4)
Cheilectomy ± Moberg osteotomy	12 (5.9)
Bunionectomy (first MT osteotomy)	9 (4.5)
First MTPJ synthetic cartilage implant	9 (4.5)
Hammertoe correction	7 (3.5)
Ankle stabilization	7 (3.5)
Neuroma resection	6 (3.0)
Sesamoidectomy	5 (2.5)
Ankle ORIF	4 (2.0)
Excision soft tissue mass	4 (2.0)
Lesser metatarsal osteotomy	2 (1.0)
OCL debridement/microfracture	2 (1.0)
Revision total ankle replacement	2 (1.0)

Abbreviations: MT, metatarsal; MTPJ, metatarsophalangeal joint; ORIF, open reduction internal fixation; OCL, osteochondral lesion.
[a]Data expressed as n (% of cohort).

Results

Overall, 66.3% of patients (134/202) had higher expectations, 21.3% of patients (43/202) had concordant expectations, and 12.4% of patients (25/202) had lower expectations compared with their surgeons. On average, patients had higher overall expectations scores than surgeons (70 ± 20 vs 52 ± 20 points; mean difference 18 points, 95% CI 15, 22; $P < .001$). There was no difference in the number of expectations between patients and surgeons (19 ± 4 vs 19 ± 5, $P = .88$). Patients expected complete improvement in a greater number of items than surgeons (11 ± 7 vs 1 ± 3, $P < .001$).

Patients had higher expectations than surgeons for 18 of 23 items (78%) (Table 4). Items with the greatest numbers of patients with higher expectations than surgeons were "improve confidence in foot/ankle," "prevent foot/ankle from getting worse," "improve pain at rest," "improve ability to go up and down stairs," and "go back to normal again." There was no effect of major or minor surgery found on differences between patient and surgeon overall expectations scores ($P = .14$), number of expectations ($P = .20$), or expectations with complete improvement expected ($P = .81$).

Greater differences between patients and surgeons in numbers of expectations were significantly, but weakly, correlated with higher BMI ($r = 0.156$, $P = .027$). No correlations were found between age or BMI and differences in overall expectations score or number of expectations with complete improvement expected. Individual surgeon was associated with differences between patient and surgeon overall expectations, number of expectations, and number of expectations with complete improvement expected ($P < .001$ for all). Figure 1 shows patient and surgeon expectations for each surgeon. No associations were found between age, sex, race, marital status, work status, education level, payer type, diagnosis, CCI, prior foot or ankle surgery, prior orthopedic surgery, revision surgery, or use of an assistive device and differences between patient and surgeon expectations. There were no differences found in demographic or clinical characteristics between the patients in the 3 levels of patient-to-surgeon agreement in expectations, including BMI (Table 5).

Discussion

In this study, we aimed to assess differences between patient and surgeon expectations of foot and ankle surgery and to determine whether these differences were associated with major or minor surgery, patient demographic or clinical characteristics, or individual surgeon. We found that more than two-thirds of patients had higher overall expectations than their surgeons. There was no effect of major or minor surgery on differences in expectations. Higher patient BMI was associated with greater patient than surgeon expectations, and differences in patient-surgeon expectations varied by surgeon.

We found that more than two-thirds of foot and ankle patients have higher overall expectations scores than their surgeons. This suggests that most patients were more optimistic about foot and ankle surgical outcomes than their surgeons, as patients may have been poorly informed about what to expect, which may lead to worse satisfaction if patient expectations are not met. Conversely, patients with lower expectations than their surgeons may be more hesitant about surgery and may delay or cancel the procedure. In particular, patients had a greater number of expectations with complete improvement expected compared to surgeons, with most surgeons having few or no items with complete improvement expected. This suggests that the expectation of complete improvement was seldom specifically addressed with patients and is an important point to take into consideration during preoperative discussions. However, it is unclear whether patient or surgeon expectations are more accurate in terms of predicting outcomes in foot and ankle surgery, which should be investigated in future studies. We found no effect of having major or minor surgery on differences between surgeon and patient expectations of foot or ankle surgery, suggesting that improvement in the surgeon-patient dialogue is equally important in both patient populations.

Previous orthopedic studies have also found that patients have higher expectations than their surgeons preoperatively.

Table 4. Item-Specific Expectations Agreement Between Patients and Surgeons.

	Patient expectations compared to surgeon expectations[a]			Wilcoxon signed-rank test
Foot and Ankle Expectations Survey Items	Lower	Same	Higher	*P* value
Improve confidence in foot/ankle	12 (6)	27 (13)	163 (81)	<.001[b]
Prevent foot/ankle from getting worse	9 (4)	30 (15)	163 (81)	<.001[b]
Improve pain at rest	19 (9)	31 (15)	152 (75)	<.001[b]
Improve ability to go up and down stairs	12 (6)	45 (22)	145 (72)	<.001[b]
Go back to normal again	27 (13)	32 (16)	143 (71)	<.001[b]
Improve foot/ankle flexibility	30 (15)	30 (15)	142 (70)	<.001[b]
Improve ability to walk longer or farther	8 (4)	55 (27)	139 (69)	<.001[b]
Improve ability to walk on uneven ground (such as banked sidewalks, cobblestones)	23 (11)	44 (22)	135 (67)	<.001[b]
Improve foot/ankle balance and stability	34 (17)	38 (19)	130 (64)	<.001[b]
Decrease pain elsewhere (such as hips, back) because compensating for foot/ankle	46 (23)	26 (13)	130 (64)	<.001[b]
Improve appearance of foot or toes	26 (13)	47 (23)	129 (64)	<.001[b]
Improve ability to walk fast or run if necessary (such as cross the street quickly)	25 (12)	50 (25)	127 (63)	<.001[b]
Improve ability to exercise for fitness	32 (16)	50 (25)	120 (59)	<.001[b]
Decrease swelling	48 (24)	36 (18)	118 (58)	<.001[b]
Improve ability to run for sports or exercise	38 (19)	46 (23)	118 (58)	<.001[b]
Improve gait or decrease limp	39 (19)	48 (24)	115 (57)	.001[b]
No need for pain medications	45 (22)	43 (21)	114 (56)	.003
Improve numbness or tingling	16 (8)	76 (38)	110 (54)	<.001[b]
Improve ability to fulfill work duties	44 (22)	48 (24)	110 (54)	.005
Participate more in social/family activities	46 (23)	54 (27)	102 (50)	<.001[b]
Improve ability to commute or drive	73 (36)	34 (17)	95 (47)	.777
Increase variety of shoe options	70 (35)	39 (19)	93 (46)	.801
Improve ability to perform daily activities or household chores	71 (35)	47 (23)	84 (42)	.048

[a]Values are given as number of patients (% of cohort).
[b]Significant at the Bonferroni-corrected level of significance of .002.

One study assessing differences between patient and surgeon expectations of total joint replacement found that 52.5% of TKA patients and 60.7% of THA patients had higher expectations than their surgeon.[7] However, all patients in that study attended a preoperative education class, pointing to the value of such a class in aligning patient and surgeon expectations. Another study assessing patient and surgeon expectations before THA found that both surgeons and patients had high expectations scores, with no systematic difference between their scores.[12] Conversely, prior to anterior cruciate ligament reconstruction, patients were found to have expectations that either aligned with their surgeons' or were lower in all but 6 categories.[13]

The items in our study with the greatest number of discordantly higher patient than surgeon expectations reflected psychological as well as physical aspects. Eighty-one percent and 71% of patients had higher expectations than their surgeons for the items "improve confidence in foot/ankle" and "go back to normal again," respectively. Although both items are subjective, this emphasizes the importance for surgeons to address them in preoperative consultations. This is supported by a previous study showing that they were among the most commonly cited preoperative expectations in foot and ankle patients.[3]

About 60% of patients had higher expectations than their surgeons to improve the abilities to exercise for fitness and run for sports or exercise. Similarly, Ghomrawi et al found that 75.6% of THA and 80.0% of TKA patients had higher expectations than surgeons for improvement in the ability to exercise or participate in sports.[7] And prior to anterior cruciate ligament reconstruction, 59% of patients had higher expectations than their surgeon for the ability to participate in professional sports.[13] Thus, there is an evidenced need to address patient expectations regarding exercise and sports participation preoperatively.

Only 1 prior study in the foot and ankle literature has assessed patient and surgeon expectations. Two hundred patients were interviewed after hallux valgus surgery to

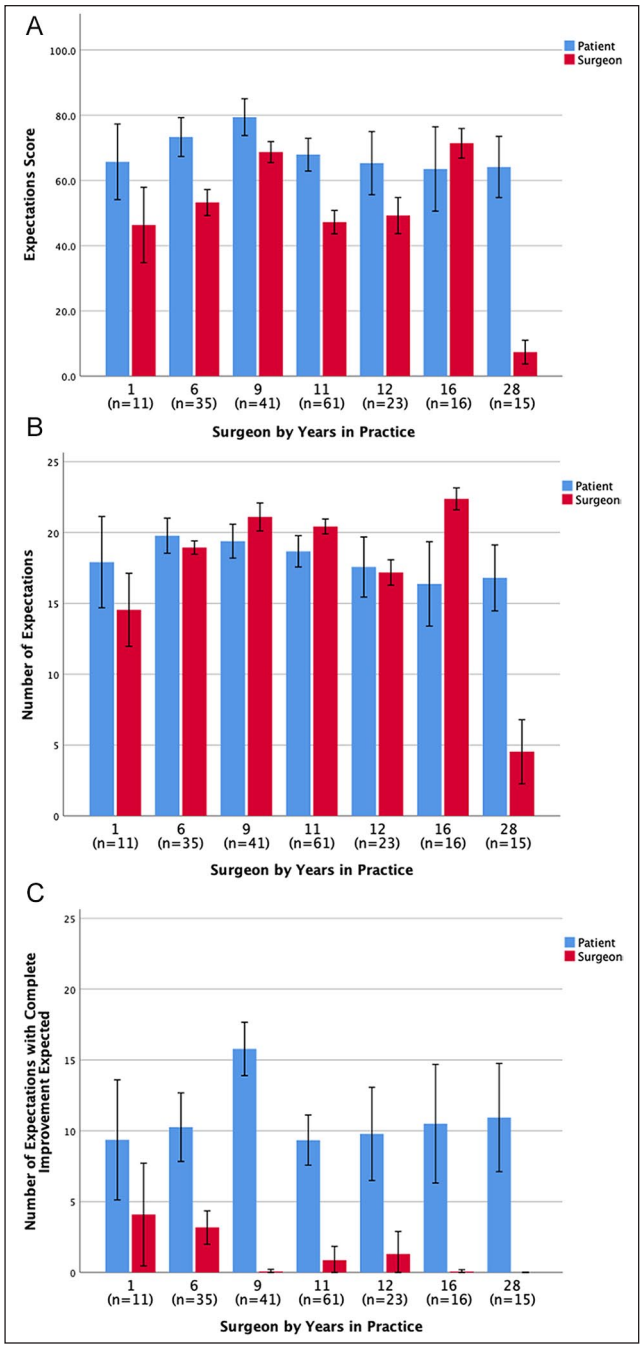

Figure 1. Patient and surgeon expectations stratified by surgeon based on years in practice (n = number of patients for each surgeon), showing (A) expectations scores, (B) numbers of expectations, and (C) numbers of expectations with complete improvement expected. Data presented as means with 95% confidence intervals.

discern the importance of 20 variables on their successful outcomes. The authors also asked 186 foot and ankle surgeons to grade the importance of the variables. Although pain relief and footwear were most important to both patients and surgeons, that study did not use a validated expectations survey or systematically compare patient and surgeon expectations.[17]

In our study, higher BMI was associated with a greater difference in numbers of expectations in patients than surgeons. This parallels prior literature showing BMI to be associated with a higher number of preoperative expectations in foot and ankle patients.[3,4] It is possible that patients with higher BMI have worse pathology leading to discordantly higher expectations than surgeons; however, we did not assess this.

Interestingly, we found no association between age, sex, or race and differences in patient and surgeon expectations. Cody et al[4] found that female sex was associated with higher expectations of complete improvement in foot and ankle surgery, and that nonwhite race was one of the strongest factors associated with higher expectations. Our results suggest that the higher expectations in these foot and ankle patient populations are relatively well matched with their surgeons'. In THA patients, increasing age has been associated with decreasing expectations in both patients and surgeons, such that no effect of age on differences in expectations was seen.[12] Although we did not investigate the effects of age on patient and surgeon expectations separately, this may also explain the lack of association we found of age on differences in expectations.

The association between individual surgeon with differences in patient and surgeon expectations highlights the variability that exists between providers. This may be due to predominant treatment of certain diagnoses and performance of certain procedures among surgeons. Although we found no association between diagnosis and differences in patient and surgeon expectations, our study may have been underpowered to detect such differences. Another cause may have been the different levels of experience among the surgeons, which could influence their understanding of what to expect after surgery and how to communicate this to patients. Less experienced surgeons tended to list a greater number of expectations with complete improvement expected than more experienced surgeons. However, the most experienced surgeon, with 28 years in practice, tended to have the lowest expectations scores and number of expectations relative to patients, but the second most experienced surgeon, with 16 years of experience, tended to have higher expectations scores and numbers of expectations relative to patients. These observations suggest that experience alone does not account for differences between patient and surgeon expectations, and that other factors are involved, such as the surgeon's personality, time spent with the patient, or different approaches to discussing typical outcomes. A study comparing patient and surgeon expectations for THA, which included 16 surgeons, found no differences in surgeon-patient differences by surgeon.[12] However, only one procedure was studied. Our results

Table 5. Patient Demographic and Clinical Variables by Patient to Surgeon Expectations Score Agreement Level.[a]

Variable	Patient to surgeon expectation score agreement level			*P* value
	Patient lower (n = 25)	Concordant (n = 43)	Patient higher (n = 134)	
Age (years)	50.8 ± 16.9	51.4 ± 17.2	52.5 ± 15.8	.86
Body mass index (kg/m^2)	25.4 ± 4.5	26.1 ± 4.8	27.6 ± 5.9	.11
Females	19 (76.0)	27 (62.8)	93 (69.4)	.51
Nonwhite race	1 (4.0)	5 (11.6)	15 (11.2)	.65
Married or domestic partner	13 (52.0)	28 (65.1)	88 (65.7)	.42
Some college or higher education	24 (96.0)	42 (97.7)	118 (88.1)	.12
Full-time employment	13 (52.0)	17 (39.5)	62 (46.3)	.58
Medicare	6 (24.0)	5 (11.6)	28 (20.9)	.35
Prior orthopedic surgery	17 (68.0)	30 (69.8)	94 (70.2)	.98
Prior foot or ankle surgery	13 (52.0)	18 (41.9)	59 (44.0)	.70
Revision	2 (8.0)	4 (9.3)	9 (6.7)	.72
Use of an assistive device	9 (36.0)	16 (37.2)	61 (45.5)	.49
Charlson Comorbidity Index ≥ 2	2 (8.0)	3 (7.0)	10 (7.5)	.99

[a]Values are given as mean ± standard deviation for continuous variables and n (% of agreement level group) for categorical variables.

suggest that it is important for foot and ankle surgeons to understand the individual expectations of patients and to advise them accordingly. Further studies are required to determine whether aspects of educational content and/or communication in preoperative discussions between patients and their providers influence differences of expectations between surgeons and patients prior to foot and ankle surgery.

Together, our results suggest that there are opportunities to better align patient and surgeon expectations of foot and ankle surgery. This could include improvements in the patient-surgeon dialogue, in which surgeons more specifically address patients' areas of expectation. In TKA, implementation of a surgeon checklist addressing areas of pain, physical therapy, and general concerns at postoperative patient visits was shown to increase patient satisfaction and expectations met.[6] Although no studies have investigated the efficacy of a preoperative checklist on aligning patient and surgeon expectations, future studies could assess how such an intervention affects differences between patient and surgeon expectations in foot and ankle surgery. It has also been shown that a preoperative education class decreases the rate of discordantly high patient expectations relative to their surgeons' expectations for TKA.[8] Further studies are required to evaluate the efficacy of such a class in the foot and ankle patient population.

This study had several limitations. First, only 65% of eligible patients were enrolled, largely because of others being unreachable prior to surgery or unwilling to participate, so there may have been response bias. This is comparable to the enrollment rate of 67%[7] in a previous study comparing surgeon and patient expectations of TKA and THA, but lower than that of 77%[12] in 1 investigating surgeon and patient expectations of THA.[12] Second, expectations not included on the HSS Foot and Ankle Expectations Survey may not have been captured. However, the survey was developed based on the most commonly cited expectations in a cohort of 94 foot and ankle patients.[5] Third, our study was conducted at an academic tertiary care hospital, so our findings may be less applicable to other practice settings. Moreover, we had a limited payer mix, with only 1 patient who had Medicaid. However, we included patients scheduled to undergo surgery with one of 7 fellowship-trained foot and ankle surgeons and included a large patient cohort, making our results potentially more generalizable to various foot and ankle surgeons. Also, we did not include patients undergoing removal of hardware, as this was considered to be a very minor procedure. Future studies should investigate differences in patient and surgeon expectations of this.

In conclusion, we found that more than two-thirds of foot and ankle patients had higher expectations than their surgeons. Expectations with the greatest discordance between patients and surgeons involved psychological aspects, as well as symptoms and physical function. Patients with higher BMI tended to have higher expectations than their surgeons. These results emphasize the importance of further exploring the dialogue between patients and surgeons regarding foot and ankle surgery, as well as other avenues of preoperative education, in order to better align patient and surgeon expectations.

Declaration of Conflicting Interests

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